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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,794

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Tomonari Sugata

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EXAMINER

GIRMA, FEKADESELESS

ART UNIT

PAPER NUMBER

2612

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/586,794		SUGATA ET AL.	
	Examiner		Art Unit	
	Fekadeselassie Girma		2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,8-13 and 15-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,8-13 and 15-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This office action is in response to Amendment filed on 27 July 2009. Claims 1, 4, 5, 8-12, 15, 16 & 20-22 are amended, and claims 2, 3, 6, 7 & 14 are cancelled and no new claim has been introduced. Therefore, claims 1, 4, 5, 8-13 & 15-22 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4, 5, 8 & 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motoshige (JP 2002-125721) in view of Shafer (5942978).

As to claim 1, Motoshige discloses, in pull tag of slide fastener 4, having claimed: an article equipped with a first identification medium met by IC chip (¶ 0004); wherein the first identification medium is always attached to a fastening product read on ¶ 0004, (note: the identification information and its antenna are buried in the pulling handle main body of the slide fastener); to be attached to the article read on ¶ 0001, (note: mainly for use in clothes, bags, golf bags, etc.). Motoshige does not explicitly disclose secondary identification medium removeably and identification medium for true and false decision.

However, Shafer in a device for removing reusable "hard" EAS tags from articles of merchandise is controlled so as to operate in response to identification data generated by an RFID element, teaches as an identification medium for true-false decision with respect to the

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article read on Fig. 8A, (note: step 150, 152, 156, 158 and 160 are a true or false decisions); a second identification medium is removably attached to the article as an identification medium for commodity distribution control with respect to the article without changing a usage state of the article met by EAS/ID tag 28 (Col. 4, Lines 46-58). It is obvious that the point-of-sale terminal determines that the proposed sale is a valid transaction, it will transmit to the detaching unit a signal indicating that the detaching unit should proceed to remove the EAS/ID tag. The data written to the RFID transponder may include, for example, date and time of sale, sale price, an indication as to whether the sale was for cash, check or credit card, credit card number and/or authorization number (if appropriate), location and/or identification number of point-of-sale terminal, identifying information for the sales associate carrying out the transaction, etc.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the Wireless transmitter key for EAS tag detacher unit of Shafer into Motoshige in order to facilitate inventory control and to prevent theft and unauthorized removal of articles from a controlled area.

As to claim 4, Motoshige further discloses the fastening product is a slide fastener read on ¶ 0004, (note: the identification information and its antenna are buried in the pulling handle main body of the slide fastener). Motoshige in view of Shafer discloses the first and second identification mediums. Motoshige further discloses, in Example 3, the identification medium is attached to a pull tab of the slide fastener read on Fig. 3 & ¶ 0012, (pulling handle main body (17) for slider of slide fastener having burying space (16) of identification body (11) is formed from a leather material). Motoshige does not explicitly disclose removable identification medium attached to pull tab. However, Shafer teaches the identification medium attached read

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on Col. 9, Lines 40-46. The artisan recognizes the obviousness of ID tags for being removably attached to articles to be identified, each of the ID tags including an identification element for transmitting identifying information via radio communication. Motoshige discloses an identification medium can be attached on a pull tab (Fig. 3 & ¶ 0012). Shafer teaches ID tags for being removably attached to articles to be identified, each of the ID tags including an identification element for transmitting identifying information via radio communication. The location of the ID tags does not make any significant invention entity for the invention. Shafer teaches a removable tack or pin portion 52 includes a head 54 and a pointed shaft 56 which is inserted into a recessed hole in the enclosure portion 50 and is held by a clamping mechanism 58 mounted in the enclosure portion 50. Housed within the enclosure portion 50 are a magnetostrictive active EAS element 60 and a bias magnet 62. It is obvious for people skilled in the art to substitute Motoshige ID tag in Fig.3 by Shafer's EAS/ID tag 28 to remove and reuse the ID tag when necessary.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the Wireless transmitter key for EAS tag detacher unit of Shafer into Motoshige in order to facilitate inventory control and to prevent theft and unauthorized removal of articles from a controlled area.

As to claim 5, the claim is interpreted and rejected as to claim 1.

As to claim 8, Shafer further teaches an identification medium for short-range recognition, and the second identification medium is a short-range communication read on Col. 7, Lines 23-35. The artisan recognizes the obviousness of The antenna 94 is positioned and the receive/transmit circuitry 96 arranged so that the effective range of the unit 26 for reading or

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writing RFID data is limited to cover only a tag which is in the nesting area 84.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the Wireless transmitter key for EAS tag detacher unit of Shafer into Motoshige in order to substantially eliminate any problem of interference from other tags that may be present at the checkout counter.

As to claim 16, Motoshige further discloses commodity distribution control on the article is carried out based on data directly or indirectly read out from a memory of the second identification medium and/or data written into the memory read on ¶ 0015.

As to claim 17, Motoshige in view of Shafer discloses all claimed limitations. Shafer further teaches as an identification medium for true-false decision on the article is carried out by comparing data from memory read on Fig. 8A, Col. 6, Lines 32-36 & Col. 8, Line 64 – Col. 9, Line 11. It is obvious that step 150, 152, 156, 158 and 160 are a true or false decision. Considering step 152, if a negative determination is made at that step (i.e. if "detach next tag" has not been stored in the control circuit), then the process advances from step 152 to step 156. At step 156 the control circuit 92 operates to cause the receive/transmit circuit 96 and the antenna 94 to transmit an interrogation signal to stimulate the RFID transponder of the tag (or transmitter-key device, as the case may be) to generate an identification signal. It is next determined, at step 158, whether the identification signal is received. If not, the process loops back to step 150.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the Wireless transmitter key for EAS tag detacher unit of Shafer into Motoshige in order the transmitter-key device functions to override the normal operating mode

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of the detacher unit, which requires receipt of a valid tag ID signal before removing a tag from an article of merchandise.

As to claim 18, the claim is interpreted and rejected as to claim 16-17.

As to claim 19, Motoshige in view of Shafer discloses all claimed limitations. Shafer further teaches the identification medium used for another new article read on Col. 4, Lines 47-51. It is obvious that a device for removing reusable "hard" EAS tags from articles of merchandise is controlled so as to operate in response to identification data generated by an RFID element in the hard tag.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the Wireless transmitter key for EAS tag detacher unit of Shafer into Motoshige in order to facilitate inventory control and to prevent theft and unauthorized removal of articles from a controlled area in cost effective way.

As to claim 20, the claim is interpreted and rejected as to claim 1, 16 & 17.

As to claim 21, the claim is interpreted and rejected as to claim 1, 16 & 17.

4. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motoshige in view of Shafer further in view of Maloney (US 7336174).

As to claim 9, Motoshige in view of Shafer discloses all claimed limitations except the two identification mediums are actuated with different frequency to each other. However, Maloney in object tracking system for tracking and controlling access to a plurality of objects, teaches the identification medium are actuated with a frequency different from each other read on Col. 18, Lines 53-56. The artisan recognizes the obviousness of In RFID, a frequency band is

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wide, several types of frequencies can be used, and different frequencies can be utilized according to the requirements of particular applications. The radio frequency identification (RFID) transponders are typically accommodated in small containers. Depending on the requirements made on the deployment of the radio frequency identification (RFID) transponders (i.e. the data transmission rate, energy of the interrogation, transmission range etc.) different types are provided for data provision and transmission on different radio frequencies, for example within a range from several 10-100 kHz to some GHz, respectively, (e.g. 134 kHz, 13.56 MHz, 860-928 MHz, 2.4 GHz etc.).

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the object tracking system with automated system control and user identification of Maloney into Motoshige in view of Shafer in order to substantially eliminate any problem of interference from other tags that may be present at the checkout counter.

As to claim 10, Maloney further suggests the identification medium is a long-range communication RFID read on Col. 18, Lines 48-53. The artisan recognizes the obviousness of RFID reader is configured for long range detection of the radio frequency transmissions of RFID chips associated with the key tags. This external reader is useful in scenarios where objects checked out of the system are to stay in the vicinity of the storage unit. One chip, for instance, might implement a short range read technology for being read by a short range reader (e.g. the reader in the storage unit) while the other might implement a long range read technology for being read by a long range reader (e.g. an external reader in the vicinity of the object tracking system). Alternatively, the two chips can be configured to operate at different radio frequencies to be read independently by readers operating at these same frequencies. The use of dual RFID

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chips is useful in theft protection applications. For instance, a customer might be allowed to hold an article inside a store, but to prevent the customer taking the article outside the store without paying, it is desired that the article do not leave the store and the vicinity of the object tracking system. For such an application, the RFID chip embedded in the article might be a short range read chip for charging the customer at checking out point in the manner described above for checkout. The long range medium tag protects the attached article from being taking away from the store without proper checkout procedure.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the object tracking system with automated system control and user identification of Maloney into Motoshige in view of Shafer in order to facilitate inventory control and to prevent theft and unauthorized removal of articles from a controlled area.

As to claim 11, the claim is interpreted and rejected as to claim 9-10.

5. Claims 12, 13 & 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motoshige in view of Shafer further in view of Takeda (JP 02003218624A).

As to claim 12, Motoshige in view of Shafer discloses all claimed limitations as above, except an antenna connecting terminal for long-range communication. However, Takeda further teaches the short-range communication RFID has an antenna connecting terminal for long-range communication, and an antenna for long-range communication is removably connected to the antenna connecting terminal read on ¶ 0024 & ¶ 0025. The artisan recognizes the obviousness of booster antennas constitutes secondary coil antennas to enhance the signal reception capability of wireless transmission or reception. Inductive coupling of the exiting antenna is carried out to the

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antenna of IC chip, and the series connection of the booster antenna L2 is carried out to the exiting antenna L1 via detour pattern B-2 of the outside of the jumper line B1 and the booster coil L2, and the jumper line B3 with the capacitor C. However, the numerals M of drawing 2 show the inductive coupling of the antenna.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the booster antenna for IC card of Takeda into Motoshige in view of Shafer in order to provide a booster coil which can operate as an external antenna of an IC chip via an exiting coil, it has the outstanding effect that the signal transduction distance of an IC card is expandable (¶ 0030).

As to claim 13, the claim is interpreted and rejected as to claim 12.

As to claim 15, Motoshige in view of Shafer and further in view of Takeda discloses all claimed limitations except a battery is removably connected to the short-range communication RFID. Official notice is taken that the use of removable battery in active RFID technology is notoriously well known and expected in the art. It would have been obvious to have included a removable battery in Motoshige in view of Shafer and further view of Takeda as a removable battery is known to supply power to active RFID tag.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the notoriously well known in the art into Motoshige in view of Shafer and further in view of Takeda in order to supply power to the RFID circuit.

6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Motoshige in view of Shafer and further in view of Demicco (US 20050057404).

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As to claim 22, Motoshige in view of Shafer discloses and further in view of Takeda teaches all claim limitations except using the removed antenna for another new article.

However, Demicco, in the same field of endeavor, teaches an antenna is removed from the article, the removed antenna is used as an antenna for long-range communication for another new article read on ¶ 0017. The artisan recognizes the obviousness of a detachable antenna module for attachment to a wireless communication device that has a built-in antenna. The detachable antenna module includes an external antenna, an activation control mechanism, and at least one attachment feature for removably attaching the antenna module to the communication device such that the antenna module and the communication device form a single mobile unit when attached. Note the detachable antenna module can be used on another article. Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the Detachable antenna module of Demicco into Motoshige in view of Shafer in order to provide external antennas which usually have higher gain than internal antennas. The higher gain of external antennas, which translates into increased coverage, particularly in fringe areas (i.e., areas where signal coverage is weaker).

Response to Arguments

7. Applicant's arguments filed 05 January 2009 have been fully considered but they are not persuasive and/or moot in view of the new ground rejection.

Citation of Other Prior Arts

8. The prior art made a record and not relied upon is considered pertinent to applicant's

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disclosure. Halperin discussed in method and system for preventing counterfeiting of high price wholesale and retail items (US 6226619).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fekadeselassie Girma whose telephone number is (571) 270-5886. The examiner can normally be reached on Monday thru Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/FG/

/Daniel Wu/
Supervisory Patent Examiner, Art Unit 2612